CLAIMS:

1. Particulate titanium dioxide having a primary particle size between 0.5 and 2.0 μ m and a reflectivity to visible light less than 95%.

2. The particulate titanium dioxide of claim 1 consisting essentially of 0.05 to 0.4% by weight of aluminum oxide and 0.1 to 0.8% by weight of zinc oxide, the balance being titanium oxide.

3. The particulate titanium oxide of claim 2 wherein 0.05 to 0.3% by weight of aluminum oxide and 0.05 to 0.5% by weight of zinc oxide are incorporated in the crystalline lattice.

4. The particulate titanium dioxide of any one of claims 1-3 having a low transmission selectively to infrared radiation of less than 3 μ m wavelength.

5. The particulate titanium dioxide of any one of claims 1-3 having a high spreadability on the human skin in a cosmetic medium.

6. A process for producing the particulate titanium oxide of claim 1 comprising:

blending hydrated titanium dioxide with 0.1 to 0.5% by weight of an aluminum compound calculated as Al_2O_3, 0.2 to 1.0% by weight of a zinc compound calculated as ZnO, and 0.1 to 0.5% by weight of a potassium compound calculated as K_2CO_3, all

percentage being based on the TiO_2 content of hydrated titanium dioxide; and

calcining the blend at a temperature between 900℃ and 1100 ℃.

7. The process of claim 6 wherein said aluminum compound is selected from the group consisting of aluminum oxide, hydrated aluminum oxide, aluminum sulfate and aluminum chloride.

8. The process of claim 6 wherein said zinc compound is selected from the group consisting of zinc oxide, zinc sulfate and zinc chloride.

9. The process of claim 6 wherein said potassium compound is potassium hydroxide or potassium chloride.

10. The process of claim 6 further comprising the steps of blending said hydrated titanium oxide as a wet cake before calcination with said aluminum, zinc and potassium compounds, and drying the wet cake so that the TiO_2 content is 50 to 60% by weight of dried blend.

11. A coating composition comprising an amount effective to shield IR radiation of the particulate titanium oxide of claim 4.

12. A plastic molding compound comprising an amount effective to shield IR radiation of the particulate titanium dioxide of claim 4.

13. A cosmetic composition comprising an amount effective to shield IR radiation of the particulate titanium dioxide of claim 4.

14. A cosmetic composition comprising an amount effective to improve the spreadability of the particulate titanium dioxide of claim 5.